

Molecule or Ion	Valence Electrons	Lewis Structure	Modified Lewis Structure (reflecting actual structure)	Electron domain geometry	Molecular geometry	Bond Angles
PF_3	$5+3 \cdot 7$ <u>26</u>			tetrahedral	trigonal pyramidal	$< 109.5^\circ$
CH_3^+	$4+3(1)$ <u>7</u>			trigonal planar	trigonal planar	120°
BrF_3	24			trigonal bipyramidal	T-shaped	90°
ClO_4^-	32			tetrahedral	tetrahedral	109.5°
XeF_2	22			trigonal bipyramidal	linear	180°
BrO_2^-	20			tetrahedral	bent	$< 109.5^\circ$
HCN	10			linear	linear	180°

Print this table and fill it in with the following molecules PF_3 , CH_3^+ , BrF_3 , ClO_4^- , XeF_2 , BrO_2^- , HCN , SO_3^{2-} , SF_4 , PF_5 , NH_3Cl^+ , N_3^- .

Molecule or Ion	Valence Electrons	Lewis Structure	Modified Lewis Structure (reflecting actual structure)	Electron domain geometry	Molecular geometry	Bond Angles
SO_3^{2-}	26			tetrahedral	trigonal pyramidal	$< 109.5^\circ$
PF_6^-	48			octahedral	octahedral	$90^\circ, 180^\circ$
NH_3Cl^+	14			tetrahedral	tetrahedral	109.5°
N_3^-	16			linear	linear	180°
SF_4	34			trigonal bipyramidal	seesaw	$< 180^\circ$ $< 90^\circ$ $< 120^\circ$

Print this table and fill it in with the following molecules PF_3 , CH_3^+ , BrF_3 , ClO_4^- , XeF_2 , BrO_2^- , HCN , SO_3^{2-} , SF_4 , PF_6^- , NH_3Cl^+ , N_3^- .